DESCRIPTION & OPERATION

WARNING: Deactivate air bag system before performing any service operation. See AIR BAG RESTRAINT SYSTEM article. Do not apply electrical power to any component on steering column without first deactivating air bag system. Air bag may deploy.

UNIVERSAL THEFT DETERRENT (UTD) SYSTEM

The Universal Theft Deterrent (UTD) anti-theft system is designed to deter vehicle theft by pulsing horns and/or exterior lights when unauthorized vehicle entry is detected. The UTD is an internal function of BCM, utilizing PASS-Key(R), serial data and various switch inputs. PCM controls fuel enable circuit. BCM must exchange a unique password with PCM to allow fuel enable. If BCM detects an illegal intrusion, BCM will disable cranking and PCM will not enable fuel delivery. UTD system interacts with Remote Function Actuation (RFA). For more information on remote transmitter and RFA system, see **KEYLESS ENTRY SYSTEM** article.

System components include door ajar switches, hatch ajar switch, door lock cylinder switches, power lock switches, hood ajar switch (export only), key in ignition switch, BCM and relays.

PASS-KEY(R) SYSTEM

PASS-Key(R) system is designed to prevent vehicle theft. If incorrect key is used, steering column is not unlocked and engine's fuel system and starter are disabled. An ignition key with a specific electrical resistance must be used in ignition key lock cylinder. PASS-Key(R) system operates using sensing contacts which are located in ignition key lock cylinder. These contact a key resistor pellet which is located on the ignition key. When lock is rotated, battery voltage is applied through appropriate fuse to Body Control Module (BCM). Pellet resistance is then compared with programmed value in BCM non-volatile memory. There are 15 different resistances available. PASS-Key(R) system also disarms UTD system from armed or alarmed mode. If an invalid key is detected, system will disable fuel and cranking for 3 minutes. If a key is inserted or ignition switch is turned before 3 minutes has elapsed, timer will reset to 3 minutes. Disconnecting battery or removing fuses will not disable timer.

BCM controls steering column lock/unlock function. Ground is supplied by BCM through ignition switch to prevent locking with key in ignition. BCM monitors lock position to assure lock command has been accomplished. If BCM is unable to determine lock position, BCM will enter fail enable mode and prevent column lock operation and fuel enable. To clear fail enable mode, disconnect BCM fuse No. 25 for 15 seconds.

System components include ignition key, ignition key lock cylinder, electronic steering column lock module, theft deterrent relay, BCM and PCM.

COMPONENT LOCATIONS

PASS-KEY(R) & UNIVERSAL THEFT DETERRENT SYSTEM COMPONENT LOCATIONS

Component	Location
Body Control Module (BCM)	Mounted Under Carpet, In Right Footwell
Clutch Pedal Position Switch	Behind Clutch Pedal
Fuel Door/Rear Compartment Lid Release Switch (Export Only)	In Center Console
Instrument Panel Electrical Center	Mounted Under Carpet, In Right Footwell
Left & Right Door Ajar Indicator Switches	In Door Latch
Left & Right Door Control Modules	Bottom Center Of Door
Left & Right Door Key Switches	Upper Rear Of Door
Park/Neutral Position (PNP) Switch	Left Side Of Transmission
Powertrain Control Module (PCM) & Underhood Electrical Center	In Engine Compartment, Near Battery

PROGRAMMING

NOTE: BCM must be reprogrammed when an ignition key or BCM is replaced. A scan tool must be used to perform programming procedure.

BCM/PASS-KEY(R)

NOTE: Performing following procedure will set DTC P1630. This is normal. After procedure is completed, turn ignition off for 30 seconds. Turn ignition on. DTC P1630 should clear. If DTC does not clear, see TESTS W/CODES article in ENGINE PERFORMANCE section.

NOTE: Battery voltage must be maintained during procedure.

1. Connect scan tool. Turn ignition on. Select BCM RPO Programming. Program BCM with proper RPO codes. Go to next step.
2. Ensure proper communications between BCM and ECM. If communication to PCM does not exist, see **TESTS W/CODES** article in ENGINE PERFORMANCE section. If communication to BCM does not exist, see **BODY CONTROL MODULE** article. If a T50/T60(R) is available, go to step 5). If a scan tool is available, go to step 4). If a scan tool is not available, go to next step.
3. Turn ignition on (engine off) for 11 minutes. Turn ignition off for 30 seconds. Turn ignition on (engine off) for 11 minutes. Turn ignition off for 30 seconds. Turn ignition on (engine off) for 11 minutes or until DTC P1630 sets. Turn ignition off for 30 seconds. Turn ignition on for 30 seconds. Start engine. If engine starts, go to BCM DIAGNOSTIC SYSTEM CHECK in **BODY CONTROL MODULE** article. If engine does not start, see **TESTS W/CODES** article in ENGINE PERFORMANCE section.
4. Connect scan tool to vehicle Diagnostic Link Connector (DLC). Turn ignition on. Using scan tool, enter SERVICE PROGRAMMING SYSTEM (SPS). After entering vehicle information, select Request Info

soft key. Select DONE and follow instructions on Vehicle Set-Up screen. Disconnect scan tool from vehicle and connect to Techline terminal. Using Techline terminal, select SERVICE PROGRAMMING SYSTEM (SPS). Select terminal to scan tool programming method. Select DONE. Follow instructions on terminal. Select Vehicle Theft Re-Learn. Select Program at summary screen. Terminal will download information to scan tool. Disconnect scan tool from terminal and reconnect to vehicle DLC. Select SERVICE PROGRAMMING SYSTEM (SPS) from main menu. Enter vehicle model year and type information. Select Theft Re-Learn soft key. Follow instructions on scan tool. Security timer will remain on for about 11 minutes or until DTC P1630 sets. DO NOT disconnect scan tool during this time. When system is ready, turn ignition off for 30 seconds. Start engine. If engine starts, go to BCM DIAGNOSTIC SYSTEM CHECK in **BODY CONTROL MODULE** article. If engine does not start, see procedures in **TESTS W/CODES** article in ENGINE PERFORMANCE section.

5. Using T50/T60(R), enter SERVICE PROGRAMMING SYSTEM (SPS). Select terminal to vehicle programming. Select DONE and follow instructions on Vehicle Set-Up screen. Select Vehicle Theft Relearn. Follow instructions on terminal. Security timer will remain on for about 11 minutes or until DTC P1630 sets. DO NOT disconnect terminal during this time. When system is ready, turn ignition off for 30 seconds. Start engine. If engine starts, go to BCM DIAGNOSTIC SYSTEM CHECK in **BODY CONTROL MODULE** article. If engine does not start, see procedures in **TESTS W/CODES** article in ENGINE PERFORMANCE section.

REPLACING IGNITION KEY (SPARE KEY AVAILABLE)

NOTE: This procedure is to replace a lost or broken key when another correct key is available.

Verifying Correct Key Code

Lost or broken keys must be replaced with a key that has proper resistance value. To determine resistance value or code, insert key into PASS-KEY(R) Interrogator (J 35628-A) and read key code. Use key blank matching this key code and cut it to match original key.

REPLACING IGNITION KEY (NO SPARE KEY AVAILABLE)

CAUTION: DO NOT disconnect Yellow 2-pin SIR connector when determining key code.

NOTE: This procedure is to replace a lost or broken key when no spare key is available.

Determining Mechanical Key Code

Determine code from code on ignition lock cylinder, recode or replace lock cylinder. Cut blank (no pellet) key to proper code for use in DETERMINING BCM PROGRAMMED KEY CODE steps.

Determining BCM Programed Key Code

To determine unknown BCM key code, use PASS-Key(R) Interrogator (J 35628-A) and Adapter (J 25628-A)

and following procedure.

1. Remove knee bolster under steering column. Connect Adapter (J 35628-A) wiring to Yellow 3-pin PASS-Key(R) dash connector at base of steering column. DO NOT connect to steering column wiring.
2. Turn on PASS-Key(R) Interrogator (J 35628-A) and move key code switch to "1" and attempt to start engine using blank key. If engine starts, key code is "1". If engine does not start, turn ignition off and press 4-minute timer on PASS-Key(R) Interrogator (J 35628-A).
3. When timer indicator light goes out, move key code switch to next number and attempt to start engine. If engine does not start, continue trying different key codes until proper key code is found.

FEATURE CUSTOMIZING

UTD functions may be customized to customer preference. Alarm mode can programmed to activate horn and lights (backup, turn signals, foglights) or horn only. System can be programmed to activate horn only, lights only or horn and lights when system is armed.

To program UTD system, turn ignition on. Press RESET button on Driver Information Center (DIC) until all warning messages are cleared from Instrument Panel Cluster (IPC) display. Press OPTIONS button until IPC displays LOCK & ARM. Press RESET button to choose UTD ARMING function. Options are HORN ONLY, LIGHTS ONLY, or HORN & LIGHTS. Press OPTIONS button again until IPC displays ALARM. Press RESET button to choose UTD ACTIVE function. Options are HORN or HORN & LIGHTS.

SYSTEM TESTING

UNIVERSAL THEFT DETERRENT (UTD) SYSTEM CHECK

Arming UTD System

1. Close all doors. Turn ignition on. If SECURITY indicator turns off when ignition is turned on, go to next step. If SECURITY indicator does not turn off when ignition is turned on, see procedures in **SECURITY INDICATOR INOPERATIVE** .
2. Turn ignition off. Remove key from ignition switch. Open left or right door. If SECURITY indicator flashes for 10 minutes, go to next step. If SECURITY indicator does not flash for 10 minutes, go to **SECURITY INDICATOR INOPERATIVE** .
3. Open left or right door. Use power door lock switch to lock doors. If SECURITY indicator remains on, go to next step. If SECURITY indicator does not remain on, go to **SECURITY INDICATOR INOPERATIVE** .
4. Repeat steps 1) and 2). Open left or right door. Use remote transmitter LOCK button to lock doors. If SECURITY indicator remains on, go to next step. If SECURITY indicator does not remain on, go to **REMOTE KEYLESS ENTRY** article.
5. Close all doors. If SECURITY indicator turns off after 10 seconds (system armed), go to next step. If SECURITY indicator does not turn off after 10 seconds (system not armed), go to **SECURITY INDICATOR INOPERATIVE** .

Activating UTD System

To activate, use power door lock switch or inside lock lever to unlock door, use inside hatch release to open hatch, or open hood (export only). If alarm does not activate, go to **THEFT DETERRENT SYSTEM INOPERATIVE** .

Disarming UTD System

1. Using key, unlock door. If alarm disarms, reset alarm and go to next step. If alarm does not disarm, go to **THEFT DETERRENT SYSTEM INOPERATIVE** .
2. Press UNLOCK button on remote transmitter. If alarm disarms, reset alarm and go to next step. If alarm does not disarm, go to **KEYLESS ENTRY SYSTEM** article.
3. Walk into range with passive transmitter (passive switch on). If alarm disarms, reset alarm and go to next step. If alarm does not disarm, go to **KEYLESS ENTRY SYSTEM** article.
4. Turn ignition on. If alarm disarms, reset alarm and go to next step. If alarm does not disarm, go to **BODY CONTROL MODULE** article.
5. Press hatch release button on remote transmitter. If alarm disarms, reset alarm and go to next step. If alarm does not disarm, go to **KEYLESS ENTRY SYSTEM** article.

SECURITY INDICATOR INOPERATIVE

NOTE: Use this test when indicator is always on, always flashing or never on.

1. Perform **UNIVERSAL THEFT DETERRENT (UTD) SYSTEM CHECK** . Using scan tool, check communications with BCM, LDCM, RDCM and PCM modules. If scan tool can communicate with all modules, go to next step. If scan tool is unable to communicate with module(s), see appropriate article for diagnosis and repair. After repair, turn ignition off. Reconnect all components and connectors. Turn ignition on. If repair is complete, see procedures in **UNIVERSAL THEFT DETERRENT (UTD) SYSTEM CHECK** .
2. Using scan tool, select IPC output functions and command SECURITY indicator ON and OFF. If indicator operates properly, go to next step. If indicator does not operate properly, see **INSTRUMENT PANEL** article.
3. Using power door lock switches, operate locks. If locks operate properly, go to next step. If locks do not operate properly, see appropriate **KEYLESS ENTRY SYSTEM** article.
4. Close both doors. Turn ignition on. If DOOR AJAR message is not displayed, go to next step. If DOOR AJAR message is displayed, see **KEYLESS ENTRY SYSTEM** article.
5. Open driver door. If DOOR AJAR message is displayed, close door and open passenger door. If DOOR AJAR message is displayed, go to next step. If DOOR AJAR mesage is not displayed, see appropriate **KEYLESS ENTRY SYSTEM** article
6. Turn ignition on. If SECURITY indicator is off, go to next step. If SECURITY indicator is on or flashing, go to step 8).
7. Check following circuits for intermittent problems. Door ajar switches, power door lock switches, hood ajar switch (export only) and communications between BCM, RDCM, LDCM and PCM. If no problems are found, system is okay. If a problem is found, repair as necessary. Turn ignition off. Reconnect all components and connectors. Turn ignition on. If repair is complete, see **UNIVERSAL THEFT DETERRENT (UTD) SYSTEM CHECK** .

8. Using scan tool, check for any UTD related DTCs. If any DTCs exist, see **DIAGNOSTIC TESTS** . If no DTCs exist, system is okay.

THEFT DETERRENT SYSTEM INOPERATIVE

NOTE: Use this test when UTD system will not Arm or Disarm properly.

1. Perform **UNIVERSAL THEFT DETERRENT (UTD) SYSTEM CHECK** . Turn ignition off. Open driver or passenger door. Lock doors using power lock switch. Close doors. System should be armed. If system arms, go to next step. If system does not arm, go to step 5).
2. Disarm system, using key to unlock driver or passenger door lock. If system does not disarm, go to next step. If system disarms, go to step 6).
3. Disarm system, using UNLOCK button on remote transmitter or by walking into range (with passive switch on). If system does not disarm, go to next step. If system disarms, see **KEYLESS ENTRY SYSTEM** article.
4. Using scan tool, check communications with BCM, LDCM, RDCM and RFA modules. If scan tool can communicate with all modules, go to step 7). If scan tool is unable to communicate with module(s), see appropriate article for diagnosis and repair. After repair, turn ignition off. Reconnect all components and connectors. Turn ignition on. If repair is complete, system is okay.
5. Turn ignition off. Close doors. Press LOCK button on remote transmitter or walk out of range (with passive switch on). If system arms properly, see **KEYLESS ENTRY SYSTEM** article. If system does not Arm, go to step 4).
6. Check following circuits for intermittent problems. Door ajar switches, door lock cylinder switches, power door lock switches, hood ajar switch (export only) and communications between BCM, RDCM, LDCM and PCM. If no problems are found, system is okay. If a problem is found, repair as necessary. Turn ignition off. Reconnect all components and connectors. Turn ignition on. If repair is complete, go to **UNIVERSAL THEFT DETERRENT (UTD) SYSTEM CHECK** .
7. Replace BCM. Program new BCM. See **PROGRAMMING** .

UTD DATA DISPLAY INFORMATION

Scan tool displays UTD data. This information assists in determining if BCM is able to receive correct data to operate UTD system. This data is received from BCM. See UTD DATA Table.

UTD DATA

UTD Data	Value (Volts)
Battery Volts	0-25.5
PASS-Key(R) Resistor Signal	0-5

UTD INPUT DISPLAY INFORMATION

Scan tool displays UTD input status. This information assists in determining if BCM is able to receive correct inputs to operate UTD system. This information is input from various sources and may be shared with other systems. See UTD INPUT table.

UTD INPUT

Input	Value
Ignition 1 (1)	ON/OFF
Ignition 2 (1)	ON/OFF
Ignition 3 (1)	ON/OFF
Key In Ignition (1)	Active/Inactive
Theft Deterrent State (1)	Active/Inactive
PASS-Key(R) State (1)	Displayed Detection State
Driver Door Ajar Switch (1)	ON/OFF
Passenger Door Ajar Switch (1)	ON/OFF
Hood Ajar Switch (1)	Active/Inactive
Hatch/Trunk Ajar Switch (1)	Active/Inactive
Column Lock State (1)	Displayed Commanded Column Lock State
Column Feedback (1)	Active/Inactive
Column Lock/Unlock "A" (1)	Active/Inactive
Column Lock/Unlock "B" (1)	Active/Inactive
Driver Door Lock/Unlock Switch (2)	Active/Inactive
Passenger Door Lock/Unlock Switch (3)	Active/Inactive
Driver Door Key Unlock (2)	Active/Inactive
Passenger Door Key Unlock (3)	Active/Inactive
Courtesy Switch (4)	ON/OFF
Park Lamp Input (4)	ON/OFF

(1) BCM input.

(2) Left Door Control Module input.

(3) Right Door Control Module input.

(4) Instrument Panel Cluster input.

UTD OUTPUT DISPLAY INFORMATION

Scan tool can command some UTD output functions. This feature can be used to determine if UTD system is causing malfunction or if system responsible for controlling output is cause. Scan tool can energize selected system and display status of output. Display shown is command, not result. See UTD INPUT table.

UTD OUTPUT

Output	Value
SECURITY Light (1)	ON/Off

Left Turn Signal Light (2)	ON/OFF
Right Turn Signal Light (2)	ON/OFF
Front Foglights (2)	ON/OFF
Rear Foglights (2)	ON/OFF
Backup Lights (2)	ON/OFF
Horn (2)	ON/OFF
Column Lock "A" (2)	ON/OFF
Column Lock "B" (2)	ON/OFF
(1) IPC output. (2) BCM output.	

STEERING COLUMN LOCK SYSTEM CHECK

1. Connect scan tool. Turn ignition on. Go to next step if steering column unlocks and scan tool displays the following BCM data:
   - Steering Column Lock State - IGN ON UNLOCKED
   - Key In Ignition - ACTIVE
   - Key Out Of Ignition - ACTIVE (will not change)
   - Column Feedback - ACTIVE

   If conditions are not met, go to **STEERING COLUMN LOCK MALFUNCTION** .

2. Turn ignition off (key in ignition switch). Go to next step if steering column remains unlocked and scan tool displays the following BCM data:
   - Steering Column Lock State - IGN OFF UNLOCKED
   - Key In Ignition - ACTIVE
   - Key Out Of Ignition - ACTIVE (will not change)
   - Column Feedback - ACTIVE

   If conditions are not met, go to **STEERING COLUMN LOCK MALFUNCTION** .

3. Remove key from switch. Go to next step if steering column locks and scan tool displays the following BCM data:
   - Steering Column Lock State - IGN OFF LOCKED
   - Key In Ignition - INACTIVE
   - Key Out Of Ignition - ACTIVE (will not change)
   - Column Feedback - INACTIVE

   If conditions are not met, go to **STEERING COLUMN LOCK MALFUNCTION** .

4. Insert key in ignition. Go to next step if steering column remains locked and scan tool displays the following BCM data:
    - Steering Column Lock State - IGN OFF LOCKED
    - Key In Ignition - ACTIVE
    - Key Out Of Ignition - ACTIVE (will not change)
    - Column Feedback - INACTIVE

    If conditions are not met, go to **STEERING COLUMN LOCK MALFUNCTION** .

5. Turn ignition on. System is okay if steering column unlocks and scan tool displays the following BCM data:
    - Steering Column Lock State - IGN ON UNLOCKED
    - Key In Ignition - ACTIVE
    - Key Out Of Ignition - ACTIVE (will not change)
    - Column Feedback - ACTIVE

    If conditions are not met, go to **STEERING COLUMN LOCK MALFUNCTION** .

STEERING COLUMN LOCK MALFUNCTION

NOTE: Use this test procedure when STEERING COLUMN LOCK message is displayed or steering column does not lock or unlock.

1. Perform BCM DIAGNOSTIC SYSTEM CHECK in **BODY CONTROL MODULE** article.
2. Using scan tool, retrieve BCM DTCs. If steering column DTC B2587, B2588, B2592 or B2593 are stored, perform BCM DIAGNOSTIC SYSTEM CHECK in **BODY CONTROL MODULE** article.
3. If steering column connector C207 was disconnected with ignition on, go to step 16). See **WIRING DIAGRAMS** . If connector C207 was not disconnected, go to next step.
4. Turn ignition on. Using scan tool, check BCM steering column lock state. If display is ENABLE STDBY, go to step 7). If display is not ENABLE STDBY, go to next step.
5. Turn ignition off. Using scan tool, check BCM Key In Ignition status with key in ignition. Display should read ACTIVE. Check BCM Key In Ignition status with key out of ignition. Display should read INACTIVE. If display is correct, go to next step. If display is not as specified, diagnose and repair Key In Ignition circuits between ignition switch and BCM. See **WIRING DIAGRAMS** .
6. Disconnect steering column connector C207. Using scan tool, check BCM Key Out Of Ignition status with key in ignition. Display should read ACTIVE. Check BCM Key Out Of Ignition status with key out of ignition. Display should read INACTIVE. If display is correct, go to step 8). If display is not as specified, go to step 11).
7. Using test light connected to battery voltage, probe harness connector C207 terminal "A". If test light illuminates, go to next step. If test light does not illuminate, go to step 10).
8. Remove key from ignition switch. Connect test light between harness connector C207 terminal "C" and terminal "D". Using scan tool, cycle steering column lock/unlock motor. If test light illuminates in both

lock and unlock positions, go to step 13). If light did not illuminate in both positions, go to step 12).

9. Check for open or short to ground in Light Green wire between steering wheel lock connector C207 terminal "B" and BCM connector C2 terminal C15. If an open or short was found, repair as necessary and go to step 16). If no problem was found, go to step 13).
10. Repair open circuit in Black wire between steering wheel lock connector C207 terminal "A" and ground. Go to step 16).
11. Check for open in Tan wire between BCM connector C3 terminal B8 and ignition switch connector C2 terminal "D". If an open was found, repair as necessary and go to step 16). If no problem was found, go to step 14).
12. Check for an open or short to ground in Orange wire between steering wheel lock connector C207 terminal "D" and BCM connector C3 terminal A8. Check for an open or short to ground in Purple wire between steering wheel lock connector C207 terminal "C" and BCM connector C3 terminal A6. If an open or short was found, repair as necessary and go to step 16). If no problem was found, go to step 15).
13. Replace steering column lock motor. Go to step 16).
14. Replace ignition lock cylinder. Go to step 16).
15. Replace BCM. Program BCM. See **PROGRAMMING** . Go to step 16).
16. Turn ignition off. Disconnect BCM fuse No. 25 for 15 seconds to clear BCM steering column fail enable mode. Reinstall and reconnect components and connectors. Turn ignition on. Clear DTCs. Perform BCM DIAGNOSTIC SYSTEM CHECK in **BODY CONTROL MODULE** article.

DIAGNOSTIC TESTS

DTC that affects UTD operation can be stored in different systems. Refer to DIAGNOSTIC TROUBLE CODE (DTC) DEFINITIONS table for UTD related DTCs. To access or clear DTCs, use scan tool or Instrument Panel Cluster clearing DTC feature.

DIAGNOSTIC TROUBLE CODE (DTC) DEFINITIONS

DTC	Definition
B2236 (1)	Left Door Lock Switch Fault
B2237 (2)	Right Door Lock Switch Fault
B2252 (1)	Key Cylinder Switch Fault
B2253 (2)	Key Cylinder Switch Fault
B2587 (3)	Column Lock/Unlock Drive "A"
B2588 (3)	Column Lock/Unlock Drive "A"
B2592 (3)	Column Lock/Unlock Drive "B"
B2593 (3)	Column Lock/Unlock Drive "B"
B2721 (3)	PASS-Key(R) Detection Circuit (Out Of Range)
B2722 (3)	PASS-Key(R) Detection Circuit (Short To Ground)
B2723 (3)	PASS-Key(R) Detection Circuit (Open/Short To Voltage)
B2735 (3)	PASS-Key(R) Programming Mode Active

U1016 (3)	PCM Communication Loss
P1626 (4)	Theft Deterrent System Fuel Enable Circuit
P1630 (4)	Theft Deterrent In Learn Mode
P1630 (4)	Theft Deterrent Password Incorrect

(1) Left Door Control Module (LDCM) code. See procedures in **KEYLESS ENTRY SYSTEM** article.

(2) Right Door Control Module (RDCM) code. See procedures in **KEYLESS ENTRY SYSTEM** article.

(3) See **BODY CONTROL MODULE** article for diagnosis and repair.

(4) See **TESTS W/CODES** article in ENGINE PERFORMANCE.

TESTING - ARMING & DISARMING UTD SYSTEM

ARMING

When any door or hatch is open, SECURITY indicator light will flash as a reminder to arm system. Light will turn off if there is no change after 10 minutes. To arm system, turn ignition off. With a door open, lock doors with power lock switch or Remote Keyless Entry (RKE) transmitter. For more information on remote transmitter and RFA system, see **KEYLESS ENTRY SYSTEM** article. If passive switch is on, walking out of range with remote transmitter will also activate system. Indicator light will stay on. Light will turn off if there is no change after 10 minutes. Locking doors manually will not arm system. When doors and hatch are closed, system is in doors and hatch armed mode. If both doors are closed, but hatch is open, system is in DOORS ARMED mode. System will monitor doors only for intrusion. If hatch is closed, alarm will not be activated. If unauthorized entry is detected, system goes into ALARM mode. Alarm mode sounds horns and/or flashes lights, depending on personalize options. Alarm continues for 2 minutes (30 seconds on export models). Ignition and fuel system are also disabled. This is followed by 3 minute period when horn is not sounded. System then returns to ARMED mode, unless a disarm input is received.

DISARMING SYSTEM

To disarm system, insert oval head key in door lock cylinder and unlock, or insert correct key in ignition switch and turn ignition on, or press UNLOCK button on remote transmitter. If RFA system passive switch is on, system will disarm when remote transmitter is within range. For more information on remote transmitter and RFA system, see **KEYLESS ENTRY SYSTEM** article. Disconnecting battery, removing fuses or using inside manual or power door lock switch to unlock door will not disable alarm mode.

REMOVAL & INSTALLATION

WARNING: Deactivate air bag system before performing any service operation. See AIR BAG RESTRAINT SYSTEM article. DO NOT apply electrical power to any component on steering column without first deactivating air bag system. Air bag may deploy.

CAUTION: When battery is disconnected, vehicle computer and memory systems may lose memory data. Driveability problems may exist until computer systems have completed a relearn cycle. See COMPUTER RELEARN PROCEDURES article in GENERAL INFORMATION section before disconnecting battery.

STEERING WHEEL COLUMN LOCK

Removal

Remove tilt wheel lever by releasing locking tab and pulling out lever. Remove air bag. Remove steering wheel. Remove knee bolster trim panel. Remove upper and lower column covers. Disconnect wiring harness connectors. Remove snap ring and SIR coil. Compress shaft lock shield using SIR Tool (J 23653). Remove retaining ring, wave washer and shield. Remove screws and electronic column lock from column. See **Fig. 1** .

Installation

To install, reverse removal procedure. Use NEW retaining ring and steering wheel nut. Torque steering wheel nut to 30 ft. lbs. (41 N.m).

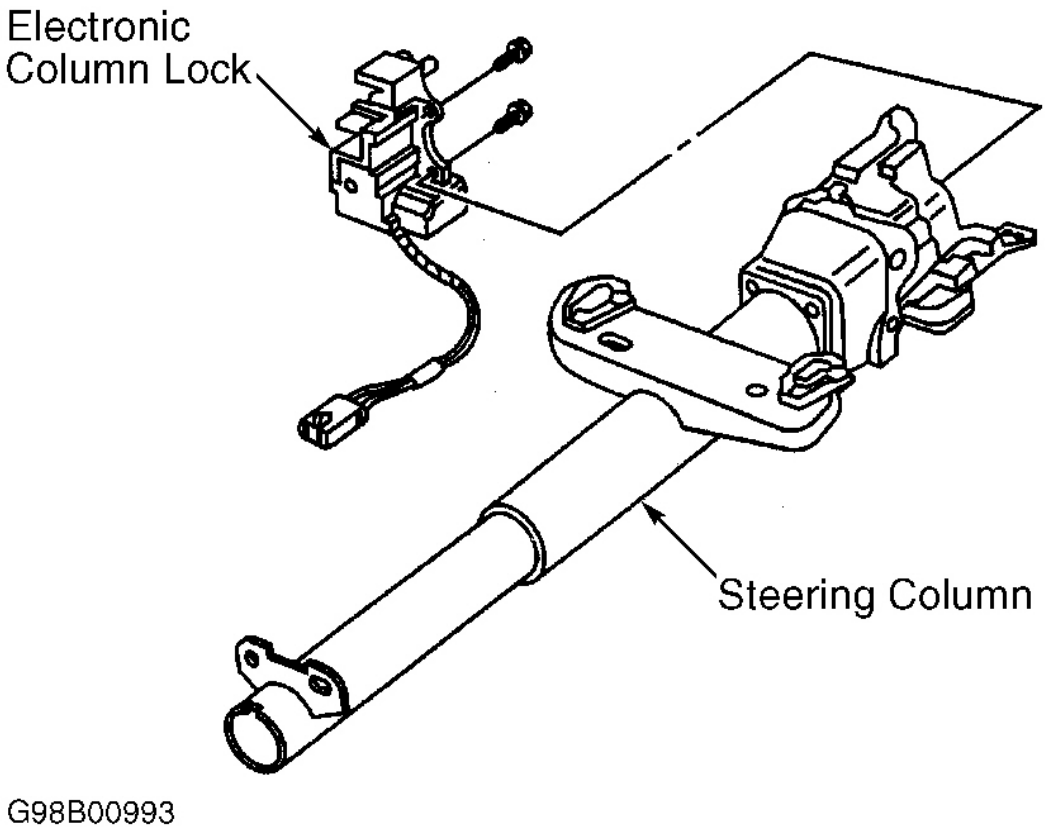

Fig. 1: Removing Electronic Column Lock
Courtesy of GENERAL MOTORS CORP.

WIRING DIAGRAMS

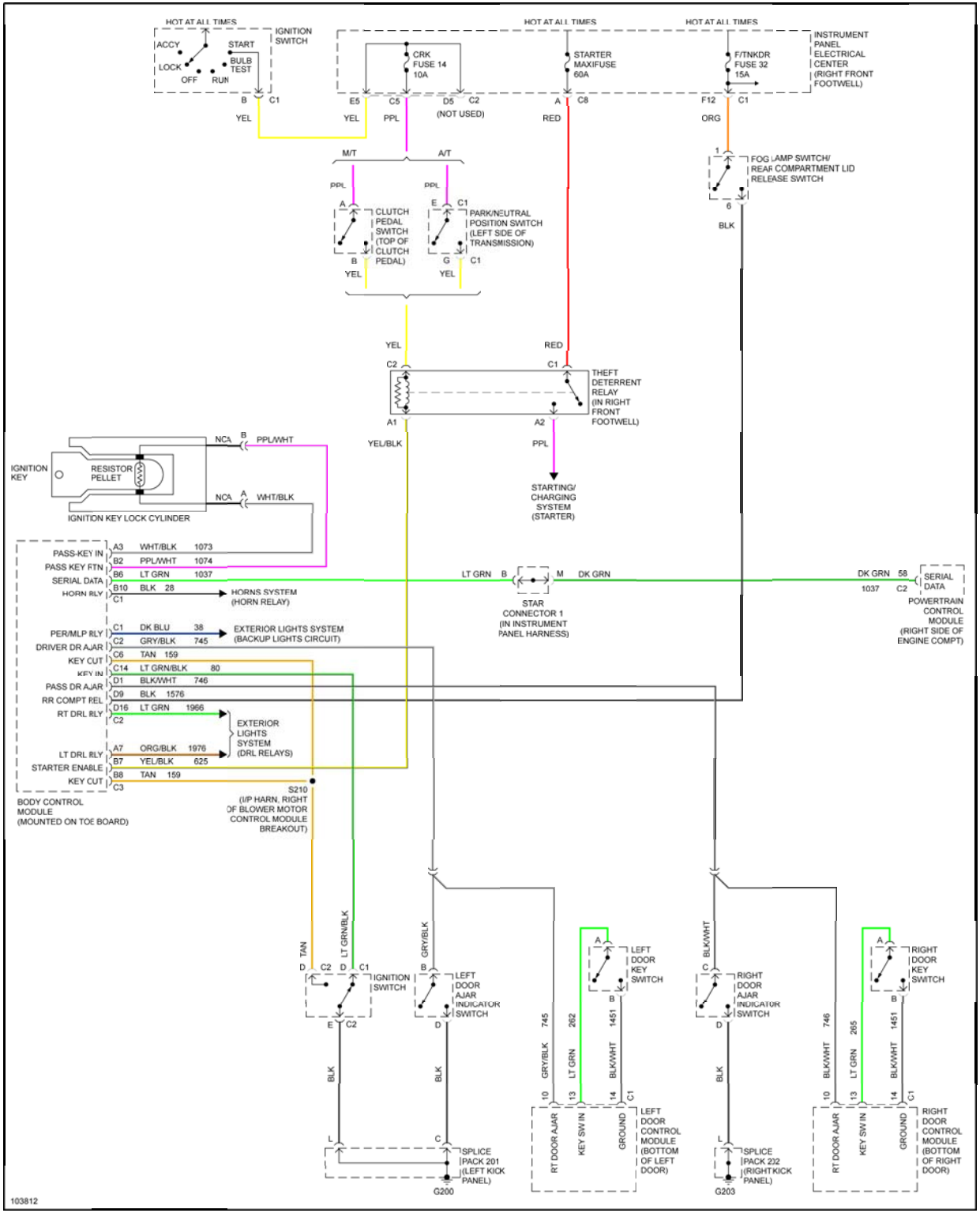
HOT AT ALL TIMES
IGNITION SWITCH
ACCY
START
LOCK
BULB TEST
OFF
RUN
B
C1
YEL
HOT AT ALL TIMES
CRK FUSE 14 10A
E5
C5
D5
C2
(NOT USED)
YEL
PPL
STARTER MAXIFUSE 60A
A
C8
RED
HOT AT ALL TIMES
INSTRUMENT PANEL ELECTRICAL CENTER (RIGHT FRONT FOOTWELL)
F/TNKDR FUSE 32 15A
F12
C1
ORG
M/T
A/T
PPL
PPL
CLUTCH PEDAL SWITCH (TOP OF CLUTCH PEDAL)
PARK/NEUTRAL POSITION SWITCH (LEFT SIDE OF TRANSMISSION)
YEL
YEL
FOG LAMP SWITCH/ REAR COMPARTMENT LID RELEASE SWITCH
BLK
YEL
RED
C2
C1
THEFT DETERRENT RELAY (IN RIGHT FRONT FOOTWELL)
A1
A2
YEL/BLK
PPL
STARTING/ CHARGING SYSTEM (STARTER)
IGNITION KEY
RESISTOR PELLET
NCA
PPL/WHT
NCA
WHT/BLK
IGNITION KEY LOCK CYLINDER
PASS-KEY IN
PASS KEY RTN
SERIAL DATA
HORN RLY
A3 WHT/BLK 1073
B2 PPL/WHT 1074
B6 LT GRN 1037
B10 BLK 28
C1
HORNS SYSTEM (HORN RELAY)
LT GRN
B
M
DK GRN
STAR CONNECTOR 1 (IN INSTRUMENT PANEL HARNESS)
DK GRN 58
1037
C2
SERIAL DATA
POWERTRAIN CONTROL MODULE (RIGHT SIDE OF ENGINE COMPT)
PER/MLP RLY
DRIVER DR AJAR
KEY CUT
KEY IN
PASS DR AJAR
RR COMPT REL
RT DRL RLY
C1 DK BLU 38
C2 GRY/BLK 745
C6 TAN 159
C14 LT GRN/BLK 80
D1 BLK/WHT 746
D9 BLK 1576
D16 LT GRN 1966
C2
EXTERIOR LIGHTS SYSTEM (BACKUP LIGHTS CIRCUIT)
EXTERIOR LIGHTS SYSTEM (DRL RELAYS)
LT DRL RLY
STARTER ENABLE
KEY CUT
A7 ORG/BLK 1976
B7 YEL/BLK 625
B8 TAN 159
C3
BODY CONTROL MODULE (MOUNTED ON TOE BOARD)
S210 (I/P HARN, RIGHT OF BLOWER MOTOR CONTROL MODULE BREAKOUT)
TAN
LT GRN/BLK
GRY/BLK
D
C2
D
C1
E
C2
IGNITION SWITCH
B
D
LEFT DOOR AJAR INDICATOR SWITCH
BLK
BLK
L
C
SPLICE PACK 201 (LEFT KICK PANEL)
G200
A
B
LEFT DOOR KEY SWITCH
10
13
14
C1
GRY/BLK 745
LT GRN 262
BLK/WHT 1451
RT DOOR AJAR
KEY SW IN
GROUND
LEFT DOOR CONTROL MODULE (BOTTOM OF LEFT DOOR)
BLK/WHT
C
D
RIGHT DOOR AJAR INDICATOR SWITCH
BLK
L
SPLICE PACK 232 (RIGHT KICK PANEL)
G203
A
B
RIGHT DOOR KEY SWITCH
10
13
14
C1
BLK/WHT 746
LT GRN 265
BLK/WHT 1451
RT DOOR AJAR
KEY SW IN
GROUND
RIGHT DOOR CONTROL MODULE (BOTTOM OF RIGHT DOOR)
103812

Fig. 2: Anti-Theft System Wiring Diagram